Comprehensive Plan Cost Table Version 12 Costs through May 31, 2017	UAO COST ESTIMATE JULY 2012	EXPENDED TO DATE POST SETTLEMENT 05/31/2017	COST TO COMPLETE REMAINING 2017-2021	TOTAL COST AT COMPLETION IN 5 YEARS	TOTAL COST AT COMPLETION WITH CONTINGENCIES	% Contingency	Cost to complete with contingency	olume to be Removed (cu. yds)	FUNDING NEEDED 2017	FUNDING NEEDED 2018	FUNDING NEEDED 2019	FUDNING NEEDED 2020	FUNDING NEEDED 2021	SUBTOTAL FUNDING REQUIRED	2022	2023	2024	TOTAL (Cost to Complete Remaining Includes below the line LTM costs)	RFP date	Start	Finish	NOTES
		Project Complete in 5 Years																				
MassDEP Funding		\$ 600,000	\$ 1,000,000 \$	1,600,000	\$ 1,600,000	0%	\$ 1,000,000		\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,000,000			\$	1,000,000.00			201	014-2021 - ETD for 3 years - Needs verification from 3/9/17 meeting - based on EPA comment
USACE Funding Pro-Serv Contract (WQMMonit)		\$ 3,900,000	\$ 8,300,000 \$	12,200,000	\$ 13,420,000	10%	\$ 9,130,000		\$ 2,750,000	\$ 2,750,000	\$ 1,210,000	\$ 1,210,000	\$ 1,210,000	\$ 9,130,000			S	9,130,000.00			Per	er Corps - \$3.9M (2014-2016), 2.5M (2017-2018) \$1.1M/yr (2019 - 2021)
Pro-Serv Contract (WQM/Monit)		\$ 7,500,000	\$ 12,500,000 \$	20,000,000	\$ 22,000,000	10%	\$ 13,750,000		\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 2,750,000	\$ 13,750,000			Ş	13,750,000.00			as	ssumes \$2.5M/yr - cost provided by Corps
Intertidal	\$ 78.400.763						e															
UH Intertidal	\$ 76,400,763	۹ .	\$ 39,400,950 \$	39,400,950	\$ 47,281,140	20%	\$ 47,281,140			\$ 23,640,570	\$ 23,640,570			\$ 47,281,140				47 281 140 00	12/1/2017	5/1/2018	6/1/2019 Acc	ssume work start in 3/18 and is fully funded and east and west sides done simultaneously, totaled using below two items.
Eastern shoreli	ne	-	\$ 30,738,750 \$ 8,662,200	***				35,130			20,0.0,0.0			¥,==,1.10								osts based upon engineers estimate \$875/yd, inc excavation, restoration, T&D -see backup
Western Shoreli	ne		\$ 8,662,200					14,437													Cos	osts based upon engineers estimate \$600/yd, incl excavation, restoration, T&D - see backup
Parcel 265		\$ 2,229,750	\$ - S	2,229,750	\$ 2,229,750	0%	\$ -														Not	ot included in UAO estimate
PMC LH		\$ 6,886,700	\$ 438,360 \$ \$ 201,940 \$	7,325,060 201,940	\$ 7,691,313 \$ 242,328	5%	\$ 460,278 \$ 242,328	222						\$ -			\$	-	40/4/0047	0/4/0040	UAI	AO included this with intertidal volume. CTC includes SES, T&D, restoration, demob
BtB	+	٩ .	\$ 665,000 \$			20%	\$ 242,328 \$ 731,500	760						9 .			3		5/1/2017	9/30/2018	10/20/2018 Not	AU miculated this with internal violatine. I or miculate SES, Tatu, restoration, derindo Of Contracted, Assumes 230 cu yds from North Street property only of Contracted. Assumes 760 cubic yards \$ \$875/yd
Marsh Island	\$ 3,380,452		\$ 2,282,220 \$	2,282,220	\$ 2,510,442	10%	\$ 2,510,442	700						\$.			\$		4/1/2017	8/1/2017	11/1/2017 Wo	ork is contracted. Cost from RAC TOWS negotiated proposal june 30 2017 - less management time
Aerovox				-,,			S -							7					33,243			in a contracted. Con non-to-to-to-magnitude proposal pine of 2017 Real management und
Aerovox Interim Cap		s -	\$ 4,800,000 \$	4,800,000	\$ 6,240,000	30%	\$ 6,240,000		\$ 6,240,000					\$ 6,240,000			S	6,240,000.00	12/1/2017	5/1/2018	7/1/2018 Not	ot Contracted. Assumed 3 ft carbon sand cover (per Corps direction). Temporary solution does not complete final remedy.
Interim Cap LTM			\$ 750,000 \$	750,000	\$ 900,000	20%	\$ 900,000			\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000	\$ 720,000	\$ 180,000.00		S	900,000.00				ot Contracted. Assumed annual benthic and sampling of cover and reporting. No replacement costs.
							\$ -															
Cell 1 Cell 1 Interim Remedy	\$ 23,958,630		\$ 1,000,000 \$	1,000,000	\$ 1,200,000	20%	\$ - \$ 1,200,000			\$ 1,000,000	\$ 50,000	\$ 50,000	\$ 100,000	\$ 1,200,000				1.200.000.00				
Cell 1 Interim Remedy						20%	¢ .			\$ 1,000,000			\$ 100,000				\$					ot Contracted. Assumed temporary AS/SVE for reduction of CVOCs.
Full Demob	\$ 7,977,325	s -	\$ 5,785,460 \$	5,785,460	\$ 7,810,370	35%	\$ 7,810,370				\$ 3,250,000	\$ 3,250,000	\$ 1,310,370	\$ 7,810,370			\$	7,810,370.47	10/1/2018	1/1/2019	1/1/2023 CTG	TC from May 2016 Jacobs proposal. Contingency based upon undefined future status and necessary improvement of Areas C and D.
Drades & Fill I HCC	\$ 39.838.604				e	0%	e															
Dredge & Fill LHCC			S	•	-	***	-															
Construct CAD C	ell	\$ 9,563,000	s - s	9,563,000	\$ 9,563,000	0%	S -							\$ -								omplete - UAO costs for all work related to CAD Cell, less the \$11.3M from EPA HQ (need to verify if paid back)
Dredge and Fill LHCC - Jaco Pre-BV - UH & LH to LHCC Mechanical - Jaco	DS DS	\$ 14,155,772 \$ 4,663,907	\$ 462,280 \$	14,155,772 5,126,187	\$ 14,155,772 \$ 5,126,187	0%	\$ - \$ 462,280			\$ 462,280		-		\$ - \$ 462,280				462,279.84				Implete
Post BV - UH & LH to LHCC Mechanical - Jacobs (37 C&		\$ 4,663,907	\$ 462,280 \$ \$ 1.060.000 \$	1,060,000	\$ 1,166,000	10%	\$ 462,260 \$ 1,166,000			\$ 402,200		\$ 3,591,942		\$ 462,260			3	3,591,942.00	-		Wo	ork is complete, pending final invoicing. UH and LH Mech dredge - MU 25, 28, silt curtains, Moby Dick.
Dredge and Fill LHCC - I		s -	\$ 14,915,983 \$	14.915.983	\$ 14,915,983	0%	\$ 14,915,983		\$ 18.700.000			ψ 0,001,04E		\$ 18,700,000			9	18,700,000,00		6/1/2017	5/1/2018 Per	ne plant 120 days (37C&D), includes current Jacobs costs er USACE Email (3/16/17) changed from \$18M to \$17M. Fixed Cost Contract estimate
Survey Contract - I		s -	\$ 700,000 \$	700,000	\$ 700,000	0%	\$ 700,000		\$ 700,000					\$ 700,000			\$	700,000.00		5/1/2017	5/1/2018 Per	er USACE Email (3/16/17) changed from \$800k to \$700k. Based on award to Bryant
Between the Bridges Subtic	ial	s -	\$ 2,573,520 \$	2,573,520		10%	\$ 2,830,872	12,868		\$ 2,830,872				\$ 2,830,872			\$	2,830,872.00	5/1/2018	11/2/2018	10/29/2018 Neg	sgotated and Awarded, added fee in Rev9 "Keleanup passes, based on BV CTC set island passes, based on BV CTC set settimate from EPA. Cost need to be revised, requires a small group meeting discussion prior to cost estimate revision.
Dredge Cleanup Passes - Jaco	bs		\$ 3,380,000 \$			10%	\$ 3,718,000	16,900		\$ 3,718,000				\$ 3,718,000			\$	3,718,000.00	2/1/2018	6/1/2018	11/1/2018 109	% cleanup passes, based on BV CTC
Cap LHC	CC \$ 5,780,303	S -	\$ 5,100,000 \$ \$ 102,720 \$	5,100,000	\$ 5,992,500 \$ 112,992	18%	\$ 5,992,500	544			ê 440.000	\$ 5,992,500		\$ 5,992,500			5	5,992,500.00	11/1/2018	12/1/2019	1/1/2020 Cos	at estimate from EPA. Cost need to be revised, requires a small group meeting discussion prior to cost estimate revision.
MU-	22		\$ 102,720 \$ \$ 990,600 \$	990,600		10%	\$ 112,992 \$ 1.089.660	4 953			\$ 112,992 \$ 1,089,660			\$ 112,992 \$ 1,089,660			3	112,992.00				cludes 4 inches overdredge (513.6 yds to LHCC, avg conc of removed material is 55.6 ppm)
MU-	29		\$ 2.565.440 \$	2.565.440	\$ 2.821.984	10%	\$ 2.821.984	12.827			\$ 2.821.984			\$ 2.821.984			\$	2.821.984.00			Inci	cludes 4 inches overdredge (4953 yds to LHCC, avg conc of removed material is 80.4 ppm) cludes 4 inches overdredge (12827.2 yds to LHCC, avg conc of removed materia is 56.3 ppm)
PN	(C		\$ 1,836,800 \$	1,836,800	\$ 2,020,480	10%	\$ 2,020,480	22,684			\$ 2,020,480			\$ 2,020,480			\$	2,020,480.00			Incl	cludes 4 inches overdredge (22684 yds to LHCC, avg conc of removed material is 80.4 ppm)
Area	R		\$ 3,685,440 \$	3,685,440	\$ 4,053,984	10%	\$ 4,053,984	18,427			\$ 4,053,984			\$ 4,053,984			\$	4,053,984.00				cludes 4 inches overdredge (18427.2 yds to LHCC, avg conc of removed material is 101.6 ppm)
Area	I L		\$ 2,196,000 \$	2,196,000	\$ 2,415,600	10%	\$ 2,415,600	10,980			\$ 2,415,600			\$ 2,415,600			S	2,415,600.00			Incl	cludes 4 inches overdredge (10980.2 yds to LHCC, avg conc of removed material is 98.3 ppm)
																					CU	UBIC YARDS TO LHCC - 70385.2
Hudraulia Dradaina	\$ 154,456,091	\$ 51,365,786		51,365,786	\$ 51,365,786	08/								2 -							204	At the second control of the State Control of the S
Hydraulic Dredging Temporary Pipeline Relo	3 134,430,091	\$ -	\$ 1,235,659 \$	1,235,659	\$ 1,235,659	0%	\$ 1,235,659							\$.			s				Ner Ner	114 through 2016 dredging less \$12M, PMC, Parcel 265, and fixed costs agotated and Awarded
Capping DDA		s -	s - s		\$ -	20%	\$ -							\$ -			S				Cap	apping of DDA cost estimated from ESD 4
Sand Cover		s -	\$ 2,925,000 \$	2,925,000	\$ 3,217,500	10%	\$ 3,217,500				\$ 3,217,500			\$ 3,217,500			\$	3,217,500.00				is is an assumed volume of 100,000 cy, mechanical placement - ASSUMES ONLY 25% COVER USED - ORIGINALLY \$11.7 AND 12.87 W/C
LTM Restoration	\$ 580.163		\$ 500,000 \$ \$ 689,052 \$	500,000 689,052	\$ 550,000 \$ 723,504	10%	\$ 550,000 \$ 723,504			\$ 275,000		\$ 80,000	\$ 275,000 \$ 80,000	\$ 550,000 \$ 160,000	\$ 80.000.00		\$ 80,000,00 \$	550,000.00 320,000.00			Yes	ear 1 after restoration and Year 5 - Not previously included.
Maintenance of Salt Marsh Restoration	\$ 580,163 \$ 721,387		\$ 689,052 \$ \$ 579,290 \$	689,052 579,290	\$ 723,504 \$ 579,290	5%	\$ 723,504 \$ 579,290				\$ 570.200	\$ 80,000	\$ 80,000	\$ 160,000 \$ 579,290	\$ 80,000.00		\$ 80,000.00 \$ \$ 579.289.63 \$	320,000.00 1,158,579.26			Cos	ost to Complete is escalated UAO cost (3.5%)
Seafood Monitoring Site Wide Benthic LTM	\$ 818,703		\$ 550,000 \$		\$ 1,140,322	U% 59/	\$ 577,500				\$ 579,290			\$ 579,290	5	577.500.00	\$ 5/9,269.63 \$	1,155,000.00				osts from MassDEP ost to Complete is escalated UAO cost (3.5%), assume 1/5yr
Fixed Costs	\$ 54,927,518	3 530,021	3 550,000 3	1,000,021	3 1,140,322	576	\$ 577,500				9 377,300			\$ 377,300		377,300.00	-	1,100,000.00				cobs Fixed Costs,
Project Management and Admin		\$ 15,603,950	\$ 7,152,011 \$	22,755,961	\$ 25,031,557	10%	\$ 7,867,212		\$ 524,481	\$ 1,573,442.43	\$ 1,573,442.43	\$ 1,573,442.43	\$ 1,573,442.43	\$ 6,818,251	\$ 666,126.30		\$	7,484,376.81				
Site Ops and Warehouse		\$ 2,888,254	\$ 4,385,244 \$	7,273,497	\$ 8,000,847	10%	\$ 4,823,768		\$ 321,585	\$ 964,753.62	\$ 964,753.62	\$ 964,753.62	\$ 964,753.62	\$ 4,180,599	\$ 484,598.10 \$ 168,485.39		\$	4,665,197.14				
Air Monitoring		\$ 1,075,808	\$ 854,105 \$	1,929,913	\$ 2,122,904	10%	\$ 939,515			\$ 187,903	\$ 187,903	\$ 187,903	\$ 187,903	\$ 751,612	\$ 168,485.39		\$	920,097.45			Air	r Monitoring for 2017 is funded.
Hybrid Dedging Cable Crossi	na l		\$ 25,746,215 \$	25 746 245	\$ 28.320.837	100/	\$ 28,320,837														Doc	need on initial proposal for TOM/ (EE 000 uds), revised, one publish hook up, includes Mahkulaterization already funded
Cable Crossi			\$ 15,093,352 \$	15,093,352		10%	\$ 16,602,687	29,361		\$ 16,602,687				\$ 16,602,687			s	16.602.687.46	11/1/2017	3/19/2018	5/28/2018 Incl	ased on initial proposal for TO#4 (55,000 yds), revised - see subtidal back up - includes Mob/winterization-already funded cludes 4 inches overdredge (29360.5 yds, avg conc of removed material is 266.5 ppm)
Area			\$ 7,198,882 \$	7,198,882	\$ 7,918,770	10%	\$ 7,918,770	14,004		\$ 7,918,770				\$ 7,918,770			S	7.019.770.36				
Area	H		\$ 8,697,550 \$	8,697,550	\$ 9,567,305	10%	\$ 9,567,305	16,919		\$ 9,567,305				\$ 9,567,305			\$	9,567,305.36	11/1/2017	7/11/2018	8/17/2018 Incl	Cables 4 Actions covertiseds; (1951 vids, per poor, of removed materials is 157.2 ppm). Laddes 4 Actions covertiseds; (1951 vids, per poor, of removed materials is 75.1 ppm) Max conc exceed 700 ppm in some samples cludes 4 Arches overtredge (1967 29 kg, avg conc of removed materials is 75.1 ppm) Max conc exceed 1,500 ppm in some samples cludes 4 Arches overtredge (1962 59 kg, avg conc of removed materials is 75.3 ppm) Max conc exceed 5,500 ppm in some samples sources 3000 cubic yards. Loudes 4 Arches overtredge (1960 25 kg, avg conc of removed materials is 36 ppm) Max conc exceed 400 ppm in some samples sources 3000 cubic yards.
Are	a I		\$ 3,581,988 \$	3,581,988	\$ 3,940,187	10%	\$ 3,940,187	6,968		\$ 3,940,187				\$ 3,940,187			\$	3,940,187.19	11/1/2017	8/20/2018	9/7/2018 Incl	Judes 4 inches overdredge (6967.9 yds, avg conc of removed material is 75.1 ppm) Max conc exceed 700 ppm in some samples
Area Area			\$ 3,747,005 \$ \$ 10,077,057 \$	3,747,005 10.077.057	\$ 4,121,705 \$ 11.084,763	10%	\$ 4,121,705 \$ 11.084,763	7,289 19,603		\$ 4,121,705 \$ 11.084,763				\$ 4,121,705 \$ 11.084,763			S	4,121,705.31	11/1/2017	9/10/2018	9/26/2018 Incl	udes 4 inches overdredge (7288.9 yds, avg conc of removed material is 58.4 ppm) Max conc exceed 1,900 ppm in some samples
Areas T &			\$ 10,077,057 \$ \$ 1,542,210 \$	1,542,210	\$ 11,084,763 \$ 1,696,431	10%	\$ 11,084,763 \$ 1,696,431	19,603		\$ 11,084,763 \$ 1,696,431				\$ 11,084,763 \$ 1,696,431			3	11,084,762.89	11/1/2017	9/2//2018	11/9/2018 Incl	audes 4 inches overdredge (19602.5 yds, avg conc of removed material is 75.3 ppm) Max conc exceeds 500 ppm in some samples
Areas I &			\$ 1,542,210 \$ \$ 1,339,101 \$	1,542,210	\$ 1,696,431 \$ 1,473,011	10%	\$ 1,696,431 \$ 1.473,011	2,605		\$ 1,696,431 \$ 1,473,011				\$ 1,696,431 \$ 1,473,011			3	1,090,431.00	11/1/2017	11/20/2018	11/25/2018 Incl	cludes 4 inches overdredge (2604.9 vds. avg conc of removed material is 36 ppm) Max conc exceed 400 ppm in some samples
			1,000,100	1,000,101	1,110,000	1011		2,000		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				1,110,011				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1112012010	99.	747
SUBTOTA	AL \$ 370,839,939	\$ 120,968,947	\$ 212,586,433 \$	333,555,381	\$ 363,232,923		\$ 238,796,039		\$ 32,186,065	\$ 96,937,681	\$ 50,895,659	\$ 20,030,541	\$ 8,831,470	\$ 208,881,416	\$ 1,579,209.79 \$	577,500.00	\$ 659,289.63 \$	211,697,415.48				
SETTLEMENT AMOUNT			ę	366,250,000	\$ 366,250,000		\$															
	+		-		,,																	20 constitution and black and advantage of the control of the cont
INTEREST	1		S	6,500,000			•														EP	PA assumption, correct interest rates and values to be provided, per EPA \$2M in avail. Funding but not in contingency.
Remaining funding			s	39,194,619	\$ 9,517,077																	
DEFERRED EXPENSES			\$ 18 627 241 \$	18.627.241	\$ 27,940,861	50%	\$ 27,940,861															
Aerovox Sediment Removal	+	•	a 18,627,241 \$	18,627,241	a 27,940,861	50%	\$ 27,940,861					-			\$ 260.000.00 \$	F77 FF	\$ 659,289.63 \$	1,496,789.63	 			
LTM Costs after 2021	\$ 1,781,530		\$ 1,781,530 \$	1,781,530	6 045	000/	0.407								\$ 260,000.00 \$	5//,500.00	a 659,289.63 \$	1,496,/89.63			LHO	HCC O&M, Seafood and Benthic
Capping DDA	a 1,781,530	٠ -	a 1,781,530 \$	1,781,530	\$ 2,137,836	20%	\$ 2,137,836					-							 			cluded in Cells #123 Final Remedy.
Costs to remove Government Owned Property	+		_	40.0/	\$ 21 596 990	2004	ê 04.505														Cos	ost estimate requires Government Property List and direction for disposal or reuse.
Cells 1,2, 3 Final Remedy - no mixed waste	+		\$ 22,969,595 \$	16,613,069 22,969,595	\$ 21,596,990 \$ 29,860,474	30% 30%	\$ 21,596,990 \$ 29,860.4	_														
Cells 1, 2, 3 Final Remedy TOTAL DEFERRED EXPENSES	+		\$ 22,969,595 \$ \$ 43,378,366 \$	22,969,595 59,991,435	\$ 29,860,474	3076	\$ 81.536					1									Inci	cludes \$1,781,530 to cap the DDA.
	1		- 43,370,300 \$	Ja, aa 1,435	1 + 01,030,101		• 01,030,1	/├──		l	l	1	l	1							inci	